DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: STANFORD POND, STN N Town: HARRISVILLE County: Cheshire River Basin: Connecticut Latitude: 42°56'27" N Longitude: 72°06'41" W Elevation (ft): 1245 Shore length (m): 1390 Watershed area (ha): 56.4 % watershed ponded: 0.0	Lake Area (ha): Maximum depth (m): Mean depth (m): Volume (m³): Relative depth: Shore configuration: Areal water load (m/yr): Flushing rate (yr-1): P retention coeff.: Lake type:	4.61 2.1 1.3 61500 0.9 1.83 7.07 5.30 0.60 natural
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BIOLOGICAL:	10 February 1997	20 August 1996
DOM. PHYTOPLANKTON (% TOTAL) #1	DINOBRYON 95%	PLANKTON NOT SAMPLED
#2		
#3		
PHYTOPLANKTON ABUNDANCE (units/mL)		
CHLOROPHYLL-A (µg/L)		
DOM. ZOOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	
#2		
#3		
ROTIFERS/LITER	10	
MICROCRUSTACEA/LITER	<1	
ZOOPLANKTON ABUNDANCE (#/L)	10	
VASCULAR PLANT ABUNDANCE		Scat/Common
SECCHI DISK TRANSPARENCY (m)		1.2
BOTTOM DISSOLVED OXYGEN (mg/L)	8.9	9.0
BACTERIA (E. coli, #/100 ml) #1		< 10
#2		
#3	3	

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m^3) : None Anoxic volume (m^3) : None

CHEMICAL:			STANFORD HARRISVII		STN N
	10 Febru	ary 1997	20 A	August	1996
DEPTH (m)	1.0		1.0		
pH (units)	6.0		7.0		
A.N.C. (Alkalinity)	6.2		6.7		
NITRATE NITROGEN	< 0.05		< 0.05		
TOTAL KJELDAHL NITROGEN	0.29		0.39		
TOTAL PHOSPHORUS	0.007		0.012		
CONDUCTIVITY (µmhos/cm)	97.1		123.3		
APPARENT COLOR (cpu)	40		43		
MAGNESIUM					
CALCIUM					
SODIUM					
POTASSIUM					
CHLORIDE	21		30		
SULFATE	5		3		
TN : TP	41		33		
CALCITE SATURATION INDEX					

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1996

D.O.	s.D.	PLANT	CHL	TOTAL	CLASS
**	4	2	**	6	Meso.

COMMENTS:

- 1. Stanford Pond is a small (11 acres), shallow (mean depth 4 feet) pond. Two stations were sampled because the pond is divided into two parts by a railroad bed. Water moves from the northern section to the southern section via a culvert under the railroad.
- 2. Only the northern station was sampled during the winter. Water quality data was collected from both stations in the summer, but plankton and chlorophyll were collected only from the southern station.

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BIOLOGICAL:	10 February 1997	20 August 1996
DOM. PHYTOPLANKTON (% TOTAL) #1	NOT SAMPLED	PERIDINIUM 50%
#2		
#3		
PHYTOPLANKTON ABUNDANCE (units/mL)		
CHLOROPHYLL-A (µg/L)		5.62
DOM. ZOOPLANKTON (% TOTAL) #1		CYCLOPOID COPEPOD 57%
#2		NAUPLIUS LARVA 17%
#3		
ROTIFERS/LITER		6
MICROCRUSTACEA/LITER		59
ZOOPLANKTON ABUNDANCE (#/L)		65
VASCULAR PLANT ABUNDANCE		Scat/Common
SECCHI DISK TRANSPARENCY (m)		1.7 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		8.5
BACTERIA (E. coli, #/100 ml) #3		< 10
#2		
#-		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m³): None Anoxic volume (m³): None

CHEMICAL:	Lake: Town:	STANFORD POND, STN S HARRISVILLE		
	10 February 1997	20 August 1996		
DEPTH (m)		1.0		
pH (units)		6.9		
A.N.C. (Alkalinity)		4.7		
NITRATE NITROGEN		< 0.05		
TOTAL KJELDAHL NITROGEN		0.38		
TOTAL PHOSPHORUS		0.009		
CONDUCTIVITY (µmhos/cm)		95.4		
APPARENT COLOR (cpu)		27		
MAGNESIUM		0.82		
CALCIUM		2.2		
SODIUM		14.2		
POTASSIUM		0.71		
CHLORIDE		. 22		
SULFATE		3		
TN : TP		42		
CALCITE SATURATION INDEX		3.4		
All results in mg/L unless indicated otherwise				

D.O.

**

S.D.

3

TOTAL

6

CHL

1

PLANT

2

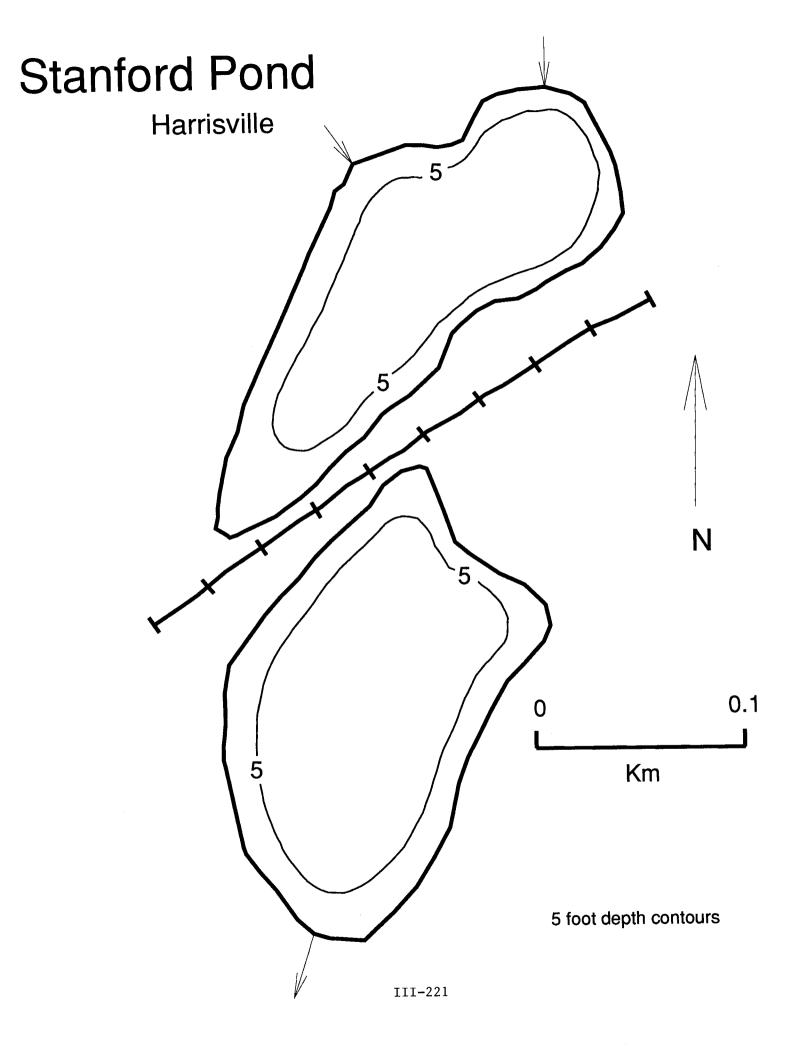
CLASS

Meso.

COMMENTS:

TROPHIC CLASSIFICATION: 1996

- 1. No winter data was collected from the southern station.
- 2. See northern station sheet for additional information.



FIELD DATA SHEET

LAKE: STANFORD POND, STN N
DATE: 08/20/96
TOWN: HARRISVILLE
WEATHER: CLEAR, WARM, SLIGHT BREEZE

DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.1	24.5	9.2	109 %
1.0	24.0	9.0	107 %
1.5	23.5	9.0	105 %

SECCHI DISK (m): 1.2 COMMENTS:

BOTTOM DEPTH (m): 1.9

TIME: 1123

*Dissolved oxygen values are in mg/L

FIELD DATA SHEET

11332				
LAKE: STANFORD PODATE: 08/20/96	OND, STN S WEATH	TOWN: HARRISVII ER: CLEAR, WARM, SL	LLE IGHT BREEZE	
DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION	
0.1	24.5	8.8	103 %	
1.0	24.0	8.5	100 %	
1.5	24.0	8.5	100 %	

SECCHI DISK (m): 1.7 VOB COMMENTS:

BOTTOM DEPTH (m): 1.7

TIME: 1123

*Dissolved oxygen values are in mg/L

Stanford Pond Harrisville s Ν N N s S p Ν 0.1 Km wooded wetland III-224

AQUATIC PLANT SURVEY DATE: 08/20/96 TOWN: HARRISVILLE LAKE: STANFORD POND, STN N PLANT NAME ABUNDANCE Key COMMON **GENERIC** Common Pickerelweed Pontederia cordata P Scattered White water lily Nymphaea Yellow water lily Sparse Y Nuphar Sparse Bur reed Sparganium Sparse Bladderwort U Utricularia Non-flowering sedge/rush Sparse С Cyperaceae or Juncus Sparse Cattail Typha OVERALL ABUNDANCE: Scat/Common GENERAL OBSERVATIONS: 1. Plants were mostly close to shore.

AQUATIC PLANT SURVEY TOWN: HARRISVILLE DATE: 08/20/96 LAKE: STANFORD POND, STN S PLANT NAME ABUNDANCE Кеу COMMON **GENERIC** Common Pickerelweed Pontederia cordata Ρ Scattered White water lily Nymphaea Scattered Yellow water lily Y Nuphar Non-flowering sedge/rush Sparse Cyperaceae or Juncus OVERALL ABUNDANCE: Scat/Common GENERAL OBSERVATIONS: 1. Plants were mostly close to shore.